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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,524	01/30/2006	Mamoru Arayashiki	NGB-39582	7126

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EXAMINER

AKINYEMI, AJIBOLA A

ART UNIT	PAPER NUMBER
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2618

NOTIFICATION DATE	DELIVERY MODE
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08/01/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/566,524	ARAYASHIKI ET AL.	
	Examiner	Art Unit	
	AJIBOLA AKINYEMI	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/30/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/7/2006, 01/30/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Heinonen (Patent No.: US 5530923).

With respect to claims 1 and 5:

Heinonen teaches a transmitting apparatus/method (fig.1) that power- amplifies a transmitting signal, the apparatus comprising transmitting power amplifying means (fig.1, item 10, 12) having a high- frequency power amplifier , wherein the transmitting power amplifying means has a first mode of operating the high- frequency power amplifier as a nonlinear amplifier (col.3, line 12-25) and a second mode of operating the high- frequency power amplifier as a linear amplifier (col.3, line 23-39), and in the first mode, amplitude modulates the transmitting signal and controls an average output level of the transmitting signal by a power supply voltage of the high- frequency power amplifier (col.4, line 12-22) and, in the second mode, controls an average output level of the transmitting signal before the high- frequency power amplifier and amplitude modulates the transmitting signal having the average output level controlled (col.3, line 61-col.4,line56).

With respect to claim 3:

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Heinonen teaches a transmitting apparatus wherein an input level of the high- frequency power amplifier is changed according to an average output power of the transmitting signal in the first mode (col.3, line 47-56, col.4, line 40-56).

With respect to claim 4:

Heinonen teaches a transmitting apparatus wherein an input level of the high- frequency power amplifier is changed according to an instantaneous output power of the transmitting signal in the first mode (col.3, line 47-56, col.4, line 40-56).

With respect to claim 6:

Heinonen teaches a radio communication apparatus for transmitting a transmitting signal from an antenna by radio, wherein the transmitting signal is power amplified by the transmitting apparatus is outputted to the antenna (fig.1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heinonen (Patent No.: US 5530923) and further in view of Otaka (Pub. No.: US 20060141964A1).

With respect to claim 2:

Heinonen teaches a transmitting apparatus/method (fig.1) that power- amplifies a transmitting signal, the apparatus comprising transmitting power amplifying means (fig.1, item 10, 12) having a high- frequency power amplifier , wherein the transmitting power amplifying means has a first mode of operating the high- frequency power amplifier as a nonlinear amplifier (col.3, line 12-25) and a second mode of operating the high- frequency power amplifier as a linear amplifier (col.3, line 23-39), and in the first mode, amplitude modulates the transmitting signal and controls an average output level of the transmitting signal by a power supply voltage of the high- frequency power amplifier and, in the second mode, controls an average output level of the transmitting signal before the high- frequency power amplifier (col.4, line 12-22) and amplitude modulates the transmitting signal having the average output level controlled (col.3, line 61-col.4,line56). Heinonen differs from claim invention in that multiplier and variable gain amplifier are not taught. Otaka teaches multiplier disposed before power amplifier and a variable gain amplifier disposed before the multiplier and in the second mode, amplitude modulates the signal by the multiplier (fig.5, Parag.0052). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to have multiplier and variable gain amplifier in order to amplify and combine the signals before reaching the output.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AJIBOLA AKINYEMI whose telephone number is (571)270-1846. The examiner can normally be reached on monday- friday (8.30-5pm) Est. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, YUWEN PAN can be reached on (571) 272-7855. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Yuwen Pan/
Primary Examiner, Art Unit 2618